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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,038	10/22/2003	Shiraz Ali Qureshi	100203780-1	6439

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EXAMINER

REHMAN, MOHAMMED H

ART UNIT	PAPER NUMBER
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2116

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/692,038	Applicant(s) QURESHI ET AL.	
	Examiner Mohammed H. Rehman	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The office acknowledges the receipt of the following and placed of record in the file:

Application dated 2/13/07

2. **Claims 1-19** are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-4, 7, 8 and 11- 19** rejected under 35 U.S.C. 102(e) as being unpatentable by McKenney et al. U.S. Patent No. 6,779,090.

Regarding Claims 1, 12 and 13, McKenney teaches a method of semaphoring between a system firmware and Advanced Configuration and Power Interface (ACPI) subsystem, the method comprising:

- (a) prior to entering a critical section [Fig-(116)] of a shared memory [col-2 lines: 40-51; Fig-4(406)] by a first entity, checking, by the first entity, a turn flag [abstract, col-2 lines: 57-63 (spin flag keeps spinning until it gets the turn is considered as turn flag)] to determine if the first entity or a second entity has a turn to access e the critical section of the shared memory, wherein

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the turn flag indicates if the first entity or the second entity has the turn to access the critical section [col-5 lines: 1-19];

(b) if the first entity has the turn to access the critical section of the shared memory, then changing, by the first entity, a value in the turn flag so that the second entity will have the turn to access the critical section of the shared memory [col-4 lines: 12-21 and col-5 lines: 44-57; Fig-1(104 and 120 to 124, first entity gets the access at 104 and pass it to second entity at 124 through 120)];

(c) if the second entity has the turn to access the critical section of the shared memory, then checking, by the first entity, an In flag [Abstract, col-2 lines: 57-63("lock flag")] of the second entity to determine if the second entity is in the critical section, wherein the In flag of the second entity has a first value [col-4 lines: 17-21] if the second entity is in the critical section [col-2 lines: 14-21];

(d) if the second entity is in the critical section, then avoiding to enter the critical section by the first entity until after the second entity exits the critical section [col-2 line: 54 to col-2 line: 3]; and

(e) entering the critical section by the first entity after the second entity exits the critical section, wherein the In flag has a second value [col-4 lines: 17-21] if the second entity is not in the critical section [col-2 lines: 14-21].

Regarding Claim 2, McKenney teaches the method of claim 1, further comprising:

setting an In flag of the first entity to the first value prior to entering the critical section [col-4 lines: 17-34(automatically setting the value for lock flag)].

Regarding Claim 3, McKenney teaches the method of claim 1, further comprising:

setting an In flag of the first entity to the second value after exiting the critical section [col-2 lines: 14-21 and col-4 lines: 17-34(reset and automatically attempting to place other “1” or “0”)].

Regarding Claim 4, McKenney teaches the method of claim 1, further comprising:

if the second entity is not in the critical section, then entering the critical section by the first entity [col-1 Line: 62 to col-2 line: 3].

Regarding Claim 7, McKenney teaches wherein the first entity checks a shared memory to determine priority in the critical section [col-5 lines: 45-47 and col-5 lines 60-65; Fig-1(120)].

Regarding Claims 8 and 11, all the same elements of Claims 1 and 7 are listed, but in apparatus form rather than method form. Therefore, the supporting rationale of the rejection to Claims 1 and 7 applies equally as well to Claims 8 and 11 accordingly.

Regarding Claims 14 and 16, McKenney teaches wherein the first entity sets an In flag of the first entity to the first value prior to entering the critical section by the first entity [col-4 lines 17-34].

Regarding Claims 15 and 17, McKenney teaches wherein the first entity sets an In flag of the first entity to the second value after the first entity exits the critical section [col-2 lines lines: 14-21 and col-4 lines: 17-21].

Regarding Claims 18 and 19, all the same elements of Claims 14 and 15 are listed, but in article form rather than apparatus form. Therefore, the supporting rationale of the rejection to Claims 14 and 15 applies equally as well to Claims 18 and 19 accordingly.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being obvious over McKenney in view of Wunderlich et al. (hereinafter, "Wunderlich") U.S. Patent No. 6,584,573.

Regarding Claim 6, McKenney teaches all the limitations of claim 6 as described in rejecting claim 1 above. McKenney does not disclose expressly wherein the first entity is the ACPI subsystem and the second entity is the system firmware in a semaphore process.

In the same field of endeavor Wunderlich discloses said first entity is the ACPI [Wunderlich, col-5(21)] subsystem and the second entity is the system firmware [Wunderlich, col-5(22)] in a semaphore process.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use first entity as the ACPI subsystem and the second entity as the system firmware in a semaphore operation.

The motivation for doing so would have been to take action to enter and/or exit the CPU sleep state [Wunderlich, col-5(30-31)].

Regarding Claim 5, since it is directly related to Claim 6 (according to the Examiner's interpretation), the supporting rationale of the rejection to Claim 6 applies equally as well to Claim 5.

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Regarding Claims 9 and 10, all the same elements of Claims 5 and 6 are listed, but in apparatus form rather than method form. Therefore, the supporting rationale of the rejection to Claims 5 and 6 applies equally as well to Claims 9 and 10 accordingly.

Response to arguments

5. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed H. Rehman whose telephone number is 571-272-1412. The examiner can normally be reached on 9.00-5.00 (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR


REHANA PERVEEN
SUPERVISORY PATENT EXAMINER
4/23/07